OHIO MEP

MEP • MANUFACTURING EXTENSION PARTNERSHIP

$459 million in new and retained sales
$103 million in new investments
4,163 jobs created or retained

Ohio MEP (OHMEP) provides companies with services and access to public and private resources that help them identify opportunities for technology adoption, diversification, and growth. Small manufactures in Ohio can receive cost-improvement services such as Lean, Six Sigma, Human Resource planning, financial planning, and business coaching through the TechSolve and MAGNET partnerships with Manufacturing and Technology Small Business Development Centers, community colleges, and local Small Business Administration centers. These partnerships leverage all the assets of the Ohio Department of Development, allowing the Ohio MEP to reach more manufacturers.

As the Ohio MEP Center for the national NIST MEP program, they serve as the one-stop-shop for information regarding technical and business assistance that small- and medium-sized manufacturers can receive from our various partners and grantees located throughout the State of Ohio. Ohio's industrial portfolio is diverse and innovative, but in today's global economy, we must constantly innovate products and processes to ensure future economic growth and prosperity.

Ohio MEP in collaboration with all Ohio Technology-Based Economic Development Programs, implements programs to establish regional and statewide clusters of innovation that sustain Ohio's global comparative advantages for product development, company growth, manufacturing competitiveness, and job creation.

For more information, contact:

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7 field offices throughout Ohio

* Impacts are based on clients receiving service in FY2009

CLIENT SUCCESS: THERMOTION LLC

"I was pleasantly surprised with the rapport which developed between the MAGNET engineers and our guys. The MAGNET team was very enthusiastic about this project."

Gary Swanson, President
Thermotion LLC

Thermotion LLC Commits to Technology Innovation to Spur Growth

Thermotion LLC designs and manufacturers Electro-Thermal Actuators (ETA) for the automotive, appliance, HVAC and aviation industries. The company was founded in the 1960s as a 'job shop' for product development. One of its first products was ETA. Between 1977 and 2006, the company continued to innovate on its original ETA technology, diversifying into four-wheel drive, refrigerator ice dispensers and reach-in cooler applications. Thermotion employs 20 people at its facility in Mentor, Ohio.

Situation:

Thermotion's proprietary ETA technology originally served very specific niche applications for the automotive, appliance and aviation industries. Although the company's own research and engineering team had made incremental technology updates straight along, the Thermotion found itself having difficulty penetrating new markets. After reviewing proposals from the previous three years, a team decided to focus on developing a dramatic innovation that would deliver greater energy efficiency, longer life expectancy, and faster recharge (stroke return). These improvements would allow Thermotion to outpace competitors in its current markets, and help the company gain entry into big existing markets like HVAC and growing new markets like medical devices.

Solution:

The MAGNET Product Design & Development (PDD) engineering team held an ideation session with Thermotion and their engineering team. The MAGNET team's ability to rapidly create FDM (Fused Deposition Modeling) prototypes saved Thermotion tens of thousands of dollars by eliminating costly retooling after release to production. FDM is a solid-based rapid prototyping method that extrudes material, layer-by-layer, to build a model. With MAGNET's assistance, the new design surpassed all Thermotion's performance improvement targets. By late 2009, Thermotion was ready to offer its innovative new product for field testing with one of its major clients, the U.S. military. By the summer of 2010, the new technology was installed on several different ground vehicles, including the Humvee, which is used by all branches of the military and by the defense departments of many other countries.

Projected sales increase of $5 million to $7 million

Results:

* Avoided $100,000 in unnecessary investments.
* Improved energy efficiency from 18-20 watts to less than 1 watt.
* Increased life expectancy from 1-2 years to 10 years.
* Improved recharge from 1 minute to instantaneous.
* Retained 14 jobs.

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